

ABSTRACT OF THE DISCLOSURE

One horizontal CCD register is provided for a plurality of vertical CCD registers. The horizontal CCD register has horizontal transfer electrodes in such a manner that transfer electrodes that are provided for each pair of vertical CCD registers adjacent to each other are independent of each other electrically. The eight transfer electrodes are supplied with eight kinds of horizontal transfer pulse signals, respectively. An operation that the horizontal CCD register consecutively outputs consecutive signal charges in the same manner as in the conventional two-phase driving method and an operation that the horizontal CCD register outputs consecutive signal charges while mixing desired ones are performed selectively by controlling the eight kinds of horizontal transfer pulse signals properly.